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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,877	01/29/2004	Mark C. Boner	042716.005	4110

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EXAMINER

CINTINS, IVARS C

ART UNIT PAPER NUMBER

1724

DATE MAILED: 12/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/767,877

Applicant(s)

BONER ET AL.

Examiner

Ivars C. Cintins

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26,27,32-35,45 and 47-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 26,27,32-35,45 and 47-55 is/are rejected.
- 7) ☒ Claim(s) 56 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 26 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Weber (U.S. Patent No. 3,289,845). The reference discloses filtering solids from a fluid by passing the fluid through a flexible (see col. 1, line 66) membrane 9, compressing the membrane with the fluid (i.e. against wall 3; see Fig. 1) to compress the filter media on the second (i.e. outer) side of the flexible membrane, and filtering the fluid through the filter media on the second side of the flexible membrane (see col. 2, lines 58-68); and this is all that appears to be required by claim 26. Applicant should note that since the flexible membrane of this reference device is formed from a filter medium, the second side of this flexible membrane “includes” filter media, as recited in claim 26. Also, after filtration, the filter cake in this reference system is agitated and removed by backwash fluid (i.e. compressed air; see col. 2, line 69 through col. 3, line 8), and this is all that appears to be further required by claim 27.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32-35, 45 and 47-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couvreur et al. (U.S. Patent No. 3,180,825; hereinafter “Couvreur”) in

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view of Masuda et al. (U.S. Patent No. 5,248,415; hereinafter "Masuda"). Couvreur discloses the claimed invention with the exception of the type of filtration material employed (i.e. compressible fibrous bundles), and the recited trough (claim 47).

Masuda discloses a similar filtration system, and teaches utilizing compressible fibrous bundles (see col. 3, lines 12-28) as the filtration media. This secondary reference further teaches utilizing a trough to direct fluid away from a treatment housing. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the filtration material of the secondary reference for the filtration material of the primary reference, since this secondary reference filtration material is capable of filtering a fluid in substantially the same manner as the filtration material of the primary reference, to produce substantially the same results. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the system of the primary reference with a trough, as disclosed by the secondary reference, in order to facilitate removal of spent backwashing liquid from this primary reference system.

Claim 56 is objected to as being dependent upon a rejected base claim, but would be allowed if rewritten in independent form to include all of the limitations of the base claim because the references of record do not teach or fairly suggest a method for filtering a fluid through a flexible membrane having compressible detached fibrous bundles on the second side of the flexible membrane.

Applicant's arguments filed September 26, 2006 have been noted and carefully considered but are not deemed to be persuasive of patentability. Applicant argues that

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it would not have been obvious to substitute the compressible filter media of Masuda for the media of Couvreur because Couvreur relates to methods for ion exchange based on chemical reaction with granular media and Masuda relates to filtering particulate with compressible media. It is pointed out, however, that although much of Couvreur does indeed relate to ion exchange based on chemical reactions (i.e. dehardening, deionization, etc.), this reference also discloses that its device could be used for "filtration" (see col. 1, line 12) of solid particles from a fluid (see col. 1, lines 28-34). Accordingly, in the filtration embodiment disclosed by Couvreur, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the filtration material of Masuda for the filtration material of this primary reference, for the reasons given above.

Applicant's remaining arguments have also been noted and carefully considered, but no longer appear to be relevant in view of the new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to I. Cintins whose telephone number is 571-272-1155. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Duane Smith, can be reached at 571-272-1166.

The centralized facsimile number for the USPTO is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ivars C. Cintins
Primary Examiner
Art Unit 1724

I. Cintins
December 9, 2006